



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

badly, we should question at once whether tests giving the same rating from time to time are not extremely insensitive measures of general mental adaptability. This bias is strengthened by the necessity for making such an assumption in order to use the methods of attenuation which have been popular. For although one can make allowances in studying the size of correlation coefficients for errors that are made in measuring a static thing, to make such corrections when the thing measured is unstable and variable is hardly permissible.

In my opinion, the fruitlessness of the mental test field is caused by the persistence of such thought habits as the three I have described. I would not contend that the propositions I have made are true. I only want to show that many fundamental notions that color the whole test field are open to superficial criticism to say the least. The justification found in Stern, that just as electricity is measured without too precise a knowledge of electricity, intelligence can also be measured without a final theoretical groundwork, has carried us too far. We must examine our basic hypotheses, putting aside as far as possible such concepts as we have formed as a result of the study of derivative facts. We must abandon in research that we hope will be of theoretical importance, assumptions and methods which critical analysis shows to be faulty, painful as this procedure may be. It is not my intention to question the very real practical value of mental tests. But the usefulness of mental tests in concrete situations can not increase beyond a certain point unless, along with the activity in the field as an applied science, results of a speculative and interpretative value are secured. It is probable that many of the failures of mental tests can be traced to our present inadequate theoretical foundations.

BEARDSLEY RUML.

THE SCOTT COMPANY LABORATORY.

PROFESSOR STRONG'S THEORY OF "ESSENCE"

I AM in agreement with so many things in the epistemological part of Professor Strong's recent volume, that I hesitate to put myself in the position of a critic. I should prefer to have it understood that I am raising certain questions of interpretation rather, with the design, not so much of establishing a rival point of view, as of clearing up ambiguities in the interests of a common platform. I do not feel clear to what extent, if any, Professor Strong really would disagree with the claims I shall here advance. But I do feel that there are points on which his own pronounce-

ments are not as unequivocal as could be desired; and two of these in particular I should like in what follows to examine.

Professor Strong's theory of knowledge, condensed into a very brief formula, is roughly this: that in knowledge we are, through the instrumentality of a psychical state, affirming the presence, in an object independent of the knowing experience, of an abstract logical essence, this objective essence alone, and neither the object nor the essence's own "givenness" being given, or immediately apprehended. And the first question I want to raise concerns the precise description of this "given essence."

My difficulty centers about the apparently wavering use in Professor Strong's exposition of two or three of his fundamental terms, and, first, of the term "object." At the start he defines explicitly the object as the independent real to which knowledge is directed;¹ and to this usage it seems to me important to keep. For if the essence *also* is an object, we appear, notwithstanding all we may say about its non-existence and its non-psychical character, inevitably tending to think of it as a shadowy image hovering before the mind, and taking the place therefore of the real thing as the primary knowledge reference. Confessedly, that is, we should have *two* objects on our hands, and so the problem of adjusting them—a problem which, as Professor Strong holds, constitutes the stumbling block to traditional forms of dualism. Nevertheless we find him continually himself adopting just this terminology. Thus he speaks of "the enormous variations of size which are observed in visual objects (*i. e.*, essences);" of the essence as the object without its existence; of the "object as an essence" being given in sense perception; of the possibility of an object being given which does not exist.²

In comparing such passages with the more explicit definition, I seem to myself to detect a mixture of two points of view which I can not see are identical, though Professor Strong apparently would think them so. The two are set alongside one another instructively in a passage in which he speaks of the essence as "a mere logical abstraction, a vision conjured up."³ Now I am unable to feel the appropriateness of speaking of a logical abstraction as a vision conjured up. Logic has to do with conceptual reality, with characters rather than with things;⁴ vision, on the contrary, suggests just the sort of concrete picture or replica which, since it need have no existence in the physical world, philosophers have found a home for in

¹ "The Origin of Consciousness," p. 35.

² Pp. 231, 175, 36, 41.

³ P. 125.

⁴ For a statement of the logical interpretation, *cf.* 176.

the realm of the mental. And in spite therefore of Professor Strong's repudiation of his own earlier distinction between phenomenal things which alone we directly perceive, and real things, or things in themselves,⁵ he not infrequently reads very much as if the essence-object were just such a phenomenal thing. Nor is his constant assertion of the non-existence of the essence necessarily inconsistent with this. I have been unable to make quite certain also what is meant by this non-existence, for it might have either of two meanings, corresponding to the distinction just noted. If the essence is strictly logical, then its non-existence supposedly stands for the fact that it is a character or group of characters merely, taken as such in abstraction from existence; it is non-existent because its existence status is not attended to in apprehending it, and so is not a part of the apprehended content. But the non-existence of the essence might also mean, simply, that it is not the actually existent object itself; there need, indeed, be no physical reality anywhere of which it is a "ghost or vision." This last however would fail to carry any implication that it is not, *as a vision*, something in itself. A ghost must apparently have *some* reality, or it would not "be" at all; and in spite of ourselves therefore we are pointed back to the psychical. And it is this second interpretation indeed that is the apparent sense of Professor Strong's most explicit account of the matter. The essence, he says, has the same unreality that belongs to shadows; the material fact called a shadow is a piece of dark ground, but *as a shadow* it is the unreal counterpart of a thing.⁶ But is the "unreal counterpart of a thing" any more than a piece of dark ground that simulates a thing, though it lacks other qualities necessary to make it the particular *sort* of thing it simulates? Surely it is unnatural to speak of a *logical* fact as a shadow, or as the "unreal counterpart of a thing." And Professor Strong is every now and then betrayed into language that implies some non-physical "existence" for the essence. He speaks of the case where something *appears* which is not real (*i. e.*, which is not the reality it appears to be?), and of the datum as the *effect* of a real object.⁷ He speaks of the essence given and the object of which it purports to be the essence as mutually independent,⁸ though two things have already been defined as "independent" when one can exist without the other.⁹ It would perhaps be possible to avoid express contradiction by explaining that what is meant is not strictly the essence,

⁵ P. 7.

⁶ P. 180.

⁷ Pp. 77, 73.

⁸ P. 62.

⁹ P. 42.

but the mental state that carries the essence; but at best the very tendency to slur over the distinction between the two after they have been so carefully separated—a tendency which is illustrated rather frequently in Professor Strong's pages¹⁰—is evidence that there is real difficulty in grasping the essence, considered as a vision, apart from a psychical embodiment. The same situation, verbally at least, is suggested by the account of the process through which the essence becomes more than an essence, and is affirmed of the existing object. When we are told that in sense perception we not only have an essence but assume it to exist, the wording seems to imply that what we do is to add existence to something already fully qualified as an object. But if it already is an object, it is not altogether easy to meet the claim that it is itself the original object of knowledge, in which case dualism has come back.

In other places I think I am able to interpret Professor Strong in a way to free him from anything except verbal contradiction, more particularly in certain passages—which might seem explicitly to be denying the view here maintained—where he argues at length that the “true data of sense perception are not qualities but qualified objects.”¹¹ But here, if I do not misapprehend him, he is not thinking about the essence at all. When he maintains that physical things, not “sensibles,” are the true data of experience, or that what is given in sense perception is the physical object,¹² he is apparently, in spite of his definition of “given” and of “datum,” not referring to the essence—to which these terms alone apply—but to the real object itself. He is intending to maintain, that is, not that the physical object is originally given, but that it is *known* or *perceived*, as the fact to which the “whole state of mind and body is adjusted”¹³—is not a mere logical construct from sensibles, as Mr. Russell would hold. But this involves not only essence, but affirmation; it is knowing, and not consciousness.¹⁴

Now a way out of these ambiguities seems to me to be available; it is to stick to the insight that the essence, or that which is given,

¹⁰ Cf. p. 70.

¹¹ P. 105.

¹² P. 48.

¹³ P. 46.

¹⁴ This is not the only place in which Professor Strong fails to live up strictly to his own definition of “given.” Thus twice within the three pages that immediately precede the formal list of definitions in which an object is defined as a real thing existing in one continuous time and space, and the essence as alone that which can be given, he has confused givenness with knowledge, and spoken of objects as given. (“The fact being that what is originally *given* or *known* is objects.” “It will show us how these mental facts are involved even in the cognition of physical facts, when yet nothing is given or experienced except the latter.”)

is not an object or picture or vision at all, but a logical schema pure and simple, a complex of abstract characters. The essence in knowledge is that which we *ascribe to* an object which is not as such experienced; and what we thus ascribe is no more a non-existent vision that it is a mental state. It is a "nature." It is necessary, in other words, to separate sharply the objectivity of an essence from its own given character, the former being a new fact which supervenes upon it. The essence as such is objective in the sense (1) that it is *not* subjective or mental (but rather logical), and (2) that it is in knowledge *used* to characterize an objective world; but it is not in itself individualized *as* an object. You can not, Professor Strong argues, see the existence of an object; you can only see the object and assume that it exists.¹⁵ But what is the difference between this and his own discarded phenomenalism? To be sure you can not see the existence of an object; but neither can you *see* the *essence*, as Professor Strong here seems to assert. You do literally see the *object*. But that implies that the only thing you see is the *existing object*, and not that you have an object first and then add existence to it. Knowledge, in other words, of which seeing is an instance, involves *both* apprehension of something (essence) *and* affirmation, and until you have the two together you do not get anything describable as an object; so that to call the essence alone an object is misleading. If we recognize this we can always mean by the object the independent real, as Professor Strong's definition requires. And thus only, as I see it, do we get rid of a vicious "representationism" in the sense in which Professor Strong defines the term. If by vision we mean the ghost of an object, then it is something seen, and we do not know directly; if on the other hand vision means only the *seeing*, then it is not itself the essence, but that which first must use the essence before we get any object at all.

And this appears to me not only to render a true account of the experienced fact, but to be the only way to meet satisfactorily the issues which neo-realism in particular has raised. In perception we do, it is clear, somehow seem to be in the direct presence of the object itself. And it seems plausible to interpret this as meaning that the real object is directly apprehended, or present bodily in experience; otherwise, we may be asked, are we not forced to say that what we call the object is only a subjective appearance, and so find ourselves in the toils of subjectivism? Now I gather that what is in Professor Strong's mind is this same sense of an actually experienced object which by opening our eyes we can see before us; only as on *his* showing this can not be the *real* object (since, for one thing, it may be present when no real object exists), it is translated

¹⁵ P. 48.

into the essence-object. As I have already said, however, it appears to me that if we are to free the term appearance from any taint of a subjective existence, and be able to hold that we are, as we seem to be, in the immediate cognitive presence of the real object, it can only be by refusing to talk of any object at all as given, or immediately apprehended, even an object without existence. And Professor Strong has already shown the way. There are two separate aspects of the naïve sense of actual contact with the physical world, which need to be carefully distinguished. There is, first, the vividness which attaches to those qualities that perceptually qualify the object, and which, as Professor Strong has pointed out, does not need at all to conflict with the insight that the essence is itself abstract. A vividly apprehended quality is still a quality, and not a thing. But now this vividness does not itself constitute objectivity, as is shown by the fact that what is felt as non-objective—a pain for example—may be realized with equal or greater vividness. The sense of the presence of a “real object which has the quality” must be explained differently. And I think it is possible to do this, and to give a plausible account of the immediate feeling that the real thing *is there*, without supposing that its being there means that it is directly experienced, in the sense in which the being there of the quality is just its vivid presence in experience, or its direct apprehension. The object is there in the sense that we feel ourselves directly in a practical or motor relationship to it. The experience of the object’s presence reduces, in so far as I can analyze it, to this tingling sense of *active tension*, of actual or potential adjustment, through which I realize myself as conditioned by, or dependent on, something which stands in active causal relationship to my body. The presence of the object is the presence of that which I instinctively recognize as able to affect my welfare as an organism; this ability to insure practical consequences *is* what I *mean* by a real thing; and the recognition is brought home to me by the tendency to muscular response which characterizes of necessity my dealings with my physical environment. Apart from this there would be no “things” in my experience, but only a variously toned field of sensuous feeling. And if objectivity is thus bound up with an experience that goes beyond immediate apprehension and reveals a world independently acting upon us, then whenever the thing-aspect of experience is involved we have, not essence and consciousness, but real existence and cognition.

As all our knowing starts from sense perception, it is not strange that in thought and memory and imagination, also, there should be reproduced, along with the group of characters, this same sense of objectivity in terms of which alone it is possible for our thinking to

deal with the real world. For it is surely so, as the neo-realists have done good service in reiterating, that we do not in thinking cognize images, but things; even when I think an imaginary object like a centaur, I am thinking a centaur, and not the image of a centaur. In thinking, it is true, I may image an object; but this very statement, if taken strictly, excludes alike the claim that the object is an image, and the claim that the essence is an object. The image is the medium *through* which I think the—independent—object. This experience I then can introspect, indeed, and recognize as involving some sort of substitute for the object, and not the actual presence, as an experience, of the object itself. But what I thus recognize is still not the essence; since the introspective act brings before the mind not the *characters* present in the perceptual experience simply, but likewise its objective reference as an affirmation or activity, this always possesses an "object" aspect which make it concrete and not abstract.¹⁶ For surely to image a horse is different from thinking the concept or essence horse; I can do this last only by attending to the abstract features which describe a horse, and to this process any picture of the horse as an object is irrelevant. And this is the only basis on which I am able to see the possibility of escape from the perplexities of neo-realism. If we separate the two meanings of presence attaching to the two aspects of real existence and of content, we can accept the claim that the *content* is apprehended, without having to suppose that the existent (or non-existent) object itself is there; *its* presence is, in thought, only the reproduction of the sense of "being in the presence of" which we get from the motor experience in sense perception, though with that vivid feeling of compulsion lacking which there normally assures belief.

It is partly into terms of this same ambiguity that another point of difficulty which I feel with Professor Strong's formulation of his doctrine seems to resolve itself—namely, his account of the status, as distinct from the nature, of the essence in knowledge. He has himself isolated the problem as the problem of *how* a sensation or mental image can convey an essence.¹⁷ To this question, however, he

¹⁶ So long as I talk of an "image," it is always the image of something, and I can not get away from "objectivity." Consequently the pure fact of psychological analysis on the existential side is not an image concretely as this implies a "thing," but a group of sensations or reproduced sensations, among which the motor sensations involved in the recognition of objectivity take their place. There may be a certain grouping or cohesion among these, though even this measure of unity seems to be due to the unifying activity of the organism and its needs. But the mere coalescing of sensations does not yet constitute an "object," apart from the further reference to an active center of force beyond me.

¹⁷ Pp. 111-2.

seems to me inclined to give two different answers; or rather he gives one answer, but every now and then suggests an alternative one. The explicit answer is: the essence is given through the function by which the sensation guides the organism in its adjustment to objects.¹⁸ Thus a horse has the essence "a fearful object" if the visual sensation causes him to shy; and the cat is *ipso facto* aware, when a certain sensation in her mind evokes instinctive movements of crouching and watching.¹⁹ That all we need for our analysis is the sensations called forth by the object, and the reaction or attitude to which they prompt,²⁰ is asserted more than once without qualification.

Now I can not at all feel, in the first place, that the reduction of cognition to a sensation plus a physical act is successful in meeting the full needs of the situation. We may indeed act upon the suggestion of a sensation; but the act is purely and simply physical, and as such lies outside the circle of the inner life of experience where knowing resides. It seems to me a plain matter of fact that we are aware through introspection of a situation quite distinguishable from this, to which we assign more naturally the name of knowledge; we are aware, that is, over and above the *de facto* physical response, of something describable as a conscious recognition *that* an object, felt to have a real and independent life of its own, is characterized by an immediately apprehended content. And of this persuasion Professor Strong's formulated theory gives no account at all. He does indeed provide a certain "experienced" element in the form of a "return wave" from the act of attention or adjustment, which gives a special coloring to the cognitive state;²¹ but this at best explains only our sense of activity in knowing, and not at all the special features of cognition of its content side. And Professor Strong is himself constantly using language that goes beyond his own analysis. He speaks of "conjuring up" the essence, of its being "brought before the mind," of the symbolic use of the psychic state which "gives rise to a vision-of-the-object," of essences as "loopholes through which we truly contemplate" reality.²² Surely such words as these imply more than a mere sequent fact of action. Or why speak of the given essence as "rendering the object truly,"²³ if all we mean is that the sensation (which is not the essence) produces an appropriate act?

The explanation seems to me to be that Professor Strong has in

¹⁸ Cf. p. 103.

¹⁹ Pp. 122, 137.

²⁰ P. 279.

²¹ P. 137.

²² Pp. 43, 87, 170, 235.

²³ P. 232.

mind two separate problems, which he does not sufficiently distinguish; and his more explicit doctrine has reference only to one of these, and that, for epistemology, the less fundamental one. It appears, namely, that when he talks of cognition, he intends by the term, when he is speaking strictly, only the *perceptual* experience to begin with,²⁴ and even this in a particular and narrow sense—the practical or biological sense, rather than the epistemological or contemplative one. In other words, cognition means to him that instinctive relationship in which we stand, in perception, to the physical world in terms of adjustment to the environment—a “function existing primarily for the sake of action.”²⁵ This is the fundamental evolutionary meaning of perception. The animal, or primitive man, has no concern with the question whether the characters given in perception possess true ontological significance; what he is interested in solely is its practical service as a stimulus to response, in terms of a successful carrying out of the functions of life. And so far cognition falls within the lines of Professor Strong’s theory. It is enough if the sensation serve as a mark or symbol for the guidance of action; and the truth of the cognitive process is sufficiently covered by the success of the act to which it leads. But it is necessary to note very clearly that the utility of sense experience for guiding action, and its adequacy for giving us a true account of the nature of things, or for serving as a “loophole through which we truly *contemplate* reality,” are things quite distinguishable.

And now what I wish particularly to point out is that Professor Strong is able to justify his own answer to the question, How is the essence conveyed by a sensation? only by failing again to live up to his definition of the given. “Cognition, in fine,” he writes, “is extremely simple; it is nothing but the givenness of an essence, and the acting in consequence as if an object existed.”²⁶ The essence, it appears from this (and indeed from his definitions generally), must be given before the act can follow. But before the act there is nothing discoverable except the sensation, to whose nature the essence may be, Professor Strong holds, entirely foreign. It is to be remembered once more that Professor Strong professes to distinguish givenness, or consciousness, from cognition, and that only the latter brings the physical object itself into the situation; and he expressly contrasts his own theory with that of James as a theory of consciousness *versus* cognition.²⁷ But if givenness is a function

²⁴ Cf. especially p. 228.

²⁵ P. 7.

²⁶ P. 40.

²⁷ P. 130.

of the sensation in leading to an act, what is left as a description of what he intends by cognition? Is not in fact this act just the affirmation which Professor Strong *adds* to givenness in order to explain knowledge, and which he has defined as the "implication of acting as if the object existed"?²⁸ In other words, it looks to me very much as if, contrary to his main thesis, no real distinction is left between givenness and cognition, if we are to explain givenness by a functional act. We might indeed make givenness only the *potentiality*, as against the actuality, of knowing; but I do not see that this is a significant distinction. And we should at any rate still leave unanswered the problem which Professor Strong professes to be solving—*How* does the sensation convey the essence? Even granting that knowledge is sufficiently described as organic adjustment, the meaning of this question would still be, What particular feature in the psychic state makes possible the act of adjustment? and this is not answered by reasserting the fact. And still less, if knowledge possesses a genuine cognitive as *distinct* from a behavioristic value, is the givenness of the essence accounted for by anything short of an explanation of *how* a psychic state can give rise to the recognition, *prior* to action, of a definite cognitive content assumed to be a description of the object—a situation quite ignored when to a sensation we simply add an act.

Now Professor Strong seems to me to have the true answer to this question within his grasp, without however making any use of it in his explicit theory. In most cases, he writes, "we are justified in assuming that where an essence is given an object exists, and that it has the *character given in the essence*."²⁹ Now this last phrase supposedly means, not that the sensation leads to successful action merely, but that the essence, as an essence, possesses a certain character which we believe attaches to reality. The claim of attachment to reality is what we have already called affirmation, and involves an act; but what constitutes the character given, or essence? The solution suggested more than once by Professor Strong himself is: identity of character between the sensation and the object, in so far as this is needed to justify cognitive claims.³⁰ Of course it may

²⁸ P. 111; cf. p. 48.

²⁹ P. 38.

³⁰ "In so far as a visual or tactile sensation, bearing in its own nature the impress of the object, causes the organism to react as if it were in the presence of that object, in so far the object is given as an essence" (122). "In the case of vision this sense organ is so constructed as to make the sensation a sort of duplicate or picture of the object" (129). "Something corresponding to [the qualities] must be assumed in the psychic state, in order to account for the awareness being of the qualities" (140). "With the development of sense organs objects become able to evoke within the organism impressions corresponding to if not actually resembling themselves" (172). Truth means "agreement with the portion of the environment pictured sufficient at least for the attainment of practical ends" (181).

still be said that *mere* identity here is not givenness. Nothing is given except as this given essence is also cognitively *used*; givenness is an aspect always of the larger knowledge situation. But as an aspect, the capacity for "conjuring up" a definite thought content, immediately apprehended, belongs not to affirmation or act, but to the psychic state in its own right, and the characters it is able to bring upon the scene. The difference which Professor Strong makes between knowing in perception an object, and knowing in thought a past experience (in which latter case he allows that the vehicle must be a mere copy or duplicate),³¹ is thus not, as he tends to make it, a difference in kind. True "contemplative" knowledge *always* involves such a copy (or identity of character); and sense perception differs from thought only in the degree in which critical reflection may throw doubt upon the full adequacy of its profession to convey, on its qualitative side, a correct description of the real world. Meanwhile for the other and psychological question, which is interested solely in the mechanism through which a sensation or image may serve as an effective cue to conduct, the whole essence concept is irrelevant; sensation plus instinct is all that we need.

A. K. ROGERS.

YALE UNIVERSITY.

TESTS OF TRUTH

THE ancient faith that somewhere, in some form, there is such a thing as a universal criterion, a kind of philosopher's stone, the bare touch of which is sufficient to distinguish the pure gold of truth from all baser metals, is still with us, and in many disguises is strongly entrenched in modern logic and epistemology. The *dictum de omni et nullo*—that famous principle of syllogistic reasoning—still serves to separate the valid from the fallacious. The *Principle of Identity* and the *Law of Contradiction* are still invoked in the same cause, and we still have in our midst a band of true believers in the might of *Direct Intuition*, *Coherence*, *Correspondence*, and the *Inconceivability of the Opposite*. In short, wherever we have a theory of knowledge, we tend to have, among the characteristics by which it is defined or made determinate, certain attributes which come to be regarded by the faithful as infallible criteria of truth.

The object of the present paper is not to enter upon a detailed discussion of the manifold forms in which this absolutistic faith still wins its proselytes, but rather to examine the general idea which

³¹ P. 113.